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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,626	09/16/2003	Zoran Minevski	LYNN/0173.C	1915
24945	7590	10/18/2007		
STREETS & STEELE 13831 NORTHWEST FREEWAY SUITE 355 HOUSTON, TX 77040			EXAMINER BUMGARNER, MELBA N	
			ART UNIT	PAPER NUMBER
			3732	
			MAIL DATE	DELIVERY MODE
			10/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/663,626

Applicant(s)

MINEVSKI ET AL.

Examiner

Melba Bumgarner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Upon further review, the finality of the rejection of the last Office action is withdrawn and the indicated allowability of claims 1-4 and 6-40 is withdrawn. The amendment filed on September 25, 2007 has been entered and the following is the action on the merits.

2. The applicant is advised that claims 1-4 and 6-40 contain subject matter not disclosed in the original and subsequent CIP disclosures; therefore, these claims are not afforded the priority date of January 29, 2003, but that of the filing date of this application.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al. Rosenberg et al. disclose a surgical implant (column 4 line 17) having a portion of a surface of the surgical implant that is anodically treated and the surface comprises a metal of titanium wherein the metal includes less than 98 percent titanium (column 4 line 44).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-4, 6-33, and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sul (2004/0149586) in view of Rosenberg et al. and further in view of Haszmann et al. Sul discloses a method for improving the biocompatibility of a surgical implant [0008] comprising anodically treating at the a portion of a surface of the surgical implant that is disposed in a substantially calcium-free solution of a phosphorus containing compound of phosphoric acid [0053], wherein the surface to the treated comprises a metal selected from titanium alloy [0021]; however, Sul does not explicitly identify the composition of titanium alloy. Rosenberg et al. teach an implant of Ti-6Al-4V. It would have been obvious to one having ordinary skill in the art at the time the invention was made to identify titanium alloy of Sul with that taught by Rosenberg et al. in order to have titanium alloy that has high strength and known for its use in human bone replacements in view of Rosenberg et al. Sul also does not disclose the diluent of the electrolyte solution comprising phosphorus. Haszmann et al. teach the method comprising aqueous solution of phosphorus containing compound (column 3 line 27). It would have been obvious to one of ordinary skill in the at the time the invention was made to have the solution of Haszmann et al. in order to have suitable concentration of phosphorus in view of Haszmann et al. Sul does not specifically teach concentration of phosphorus containing electrolyte but concentration of the embodiment of calcium containing electrolyte of 0.1 mol/l. It would have been obvious to one of ordinary skill in the art to have phosphate containing electrolyte concentration of about 0.1 mol/l in order to perform anodic oxidation of the implant. It would have been an obvious matter of choice to have substantially calcium-free solution having a small amount of calcium compound as Sul also teaches solution containing calcium on the implant. Sul does not teach the electrolytic solution having alcohol, the solution has a temperature ranging

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from 10 to 100°C, the electrical potential is between about 30 to 500 volts. The treatment times shown by Sul is well between 15 seconds and 1 hour. Sul shows degreasing the surface before anodic treatment. Rosenberg et al. show removing oxide films from the surface before anodically treating and no electrochemically grown layer of titanium oxide prior to treating. Sul shows treatment films having thickness in the range of 0.3 to 3 microns [0052]. Sul shows porous surface of the implant for osseointegration [0008], figure 12. Sul teaches surgical implant implanted in bone and of an orthopedic implant and Haszmann et al. teach a dental implant.

7. Claims 34 and 40 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sul in view of Rosenberg et al. and Haszmann et al. and further in view of Ishizawa. The modified method of Sul, Rosenberg et al., and Haszmann et al. shows the limitations as described above; however, they do not show the porous external surface comprising sintered metal particles. Ishizawa teaches porous surface of sintered metal particles (column 4 line 23). It would have been obvious to one having ordinary skill in the art to have the surface of Ishizawa in order to improve retention of implant in bone tissue in view of Ishizawa. Ishizawa also teaches depositing hydroxyapatite over the anodically treated surface. It would have been obvious to one having ordinary skill in the art to further modify the method as in Ishizawa in order to further comprise a calcium phosphate on the anodic oxidation film in view of Ishizawa.

### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Melba Bumgarner/  
Melba Bumgarner  
Primary Examiner